Thank you for your purchase of the NHT HDP-1 Hybrid Dipole Surround Loudspeakers. Please take a few minutes to read through this Owner's Manual prior to installing your new speakers. The information provided will help you to obtain maximum performance from your audio system. If you have questions or need assistance at any time during the installation or operation of your new speakers, please call your NHT dealer or our Toll Free Customer Hotline at:

1-800-NHT-9993

Please retain the HDP-1's packaging to protect the speakers in the event that you move or transport them.

■ Design

NHT speakers are designed to deliver refined, musical sound from attractive and affordable packages. Our efforts are guided by the study of human hearing and are optimized for real-world use. Every NHT speaker undergoes rigorous testing and quality control at the factory to ensure you years of listening pleasure.

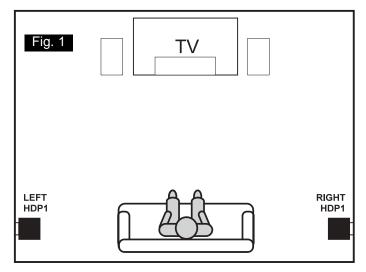
The NHT HDP-1 is designed to provide optimum sound dispersion for the rear (surround) channels in a Dolby Pro-Logic® home theater system. The HDP-1 is a hybrid dipole design which employs a unique combination of dipolar mid-tweeters that radiate sound in two directions, paired with a monopole woofer that fires into the wall for low frequency reinforcement.

NHT recommends the HDP-1 only for Pro-Logic® home theater systems, in which the rear channels receive a monaural signal of limited bandwidth, containing no low bass or high treble information. In these systems, it is beneficial to use specialized speakers for the rear channels that produce diffuse, ambient sound, to surround the viewer with non-localizable effects. The HDP-1 is not suitable for use in discrete Dolby Digital® surround systems.

■ Placement

Prior to installing the HDP-1's, spend some time considering placement options. For best results, mount the HDP-1's directly to the side of the seating position, not in front of or behind it (Fig. 1). Place the HDP-1's at a minimum height of 6 feet, to provide sufficient head clearance. Mount the HDP-1's at least a few inches from the ceiling. The HDP-1 is designed for indoor use only.

Experimentation is the key to finding the best arrangement in your listening environment. Be patient, have fun, and remember that small changes in speaker position can sometimes have a significant effect on the sound. For example, moving the speakers nearer to a corner will tend to increase their bass output, but may result in "boomy" or "muddy" sound.



Conversely, placing the speakers farther away from corners will tend to decrease their bass output, but may result in greater articulation.

In addition, room furnishings play an important role in absorbing and reflecting soundwaves. Midrange and high frequencies in particular will be absorbed by soft furnishings such as sofas, carpets and curtains. A large number of these soft furnishings will dull the sound, while a "live" room with few furnishings will brighten the sound. If you are willing to spend some time fine-tuning the performance of your system, you will enjoy the benefits for years to come.

■ Installation

Note: Whenever an object is affixed to a wall, you must take special care to mount it securely, to prevent it from falling and causing possible injury. Before attempting this installation, carefully evaluate the mounting surface, making sure that its composition and construction are strong enough to support the load safely. If you are unsure about the type or use of mounting hardware for your installation, consult a professional contractor or a knowledgeable hardware store. Make sure that any mounting hardware will not interfere with electrical wiring, plumbing, etc.

Your HDP-1 speakers are packaged with mounting brackets that are designed to securely attach the speakers to the wall. There are two components to each bracket: part "A" mounts to the wall, and part "B" mounts to the HDP-1 (Fig. 2). Once a suitable mounting location has been selected, position bracket part "A" on the wall. Using the bracket as a template, mark the two hole locations. Prepare the holes and surface for your fastening hardware, then secure the bracket to the wall.

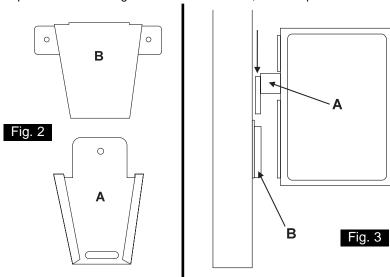
Attach bracket part "B" to the back of the HDP-1 (woofer side) using the supplied wood screws. There are pilot holes already drilled into the HDP-1,

located between the terminal cup and the woofer. Once part "B" is attached to the HDP-1, attach the speaker cable to the HDP-1 before proceeding (see "Connections"). Once the speaker cable is connected to the HDP-1, mount the speaker to the wall by simply sliding part "B" into part "A" (Fig. 3).

■ Connections

Before connecting speakers to your system, it is very important that you turn off the power to your amplifier / receiver to avoid damage to the equipment.

The HDP-1 is compatible with virtually all quality amplifiers. Proper wiring of the speaker is essential to good sound. At a minimum, 16 AWG speaker cable is rec-



ommended for runs of 10 feet or less, with 14 AWG used for larger runs. For specialty cable considerations, consult your local authorized NHT retailer. For best results, use equal length runs of cable for all the speakers. Prepare your speaker cable by stripping 1/4" to 3/8" of insulation from the ends and twisting the exposed wire strands tightly. The five-way binding posts on the back of the speaker will accept raw wire, banana plugs, or spade plugs. Tighten the binding posts by hand, as pliers can strip or break them.

Be sure to wire all the speakers "in-phase." That is, the Positive (red) terminal on the amplifier output must be connected to the corresponding Positive (red) terminal on the speaker. Likewise with the Negative (black) terminals. All speaker cables have some sort of marking along one or both conductors to help you make the correct connections. Incorrect speaker phase is indicated by weak bass and the lack of a well-defined stereo image.

To minimize noise pickup, segregate cables by function. Do not run low level signal cables parallel to power cables, speaker cables, or digital cables. Also, do not run speaker cables or digital cables parallel to power cords or parallel to each

HDP-1 Specifications

 System Type: 2-way acoustic suspension, hybrid dipole design

 Driver Complement: 4.5" long-throw woofer, two 3" mid-tweeters

 Crossover: 400Hz, 6db/octave high-pass and low-pass

- Response: 105Hz - 10KHz, +/- 3dB

- Sensitivity: 86db (2.83V at 1M)

- Power Rating: 10W/ch minimum,

100W/ch maximum

- Impedance: 8 ohms nominal,

4.4 ohms minimum

Inputs: Spring clipsWeight: 7.5 lbs. each

- Dimensions: 9.25"H x 5.75"W x 5.75"D

· Finish: High gloss black or white laminate

Specifications are subject to change without notice, in accordance with our policy of continuously upgrading the performance of our products.

other. If different types of cables are placed near each other at some place in your system, separate them by the maximum practical distance and cross them at right angles where they meet. Do not twist or tie AC power cords with speaker cables.

Operation

The HDP-1 was designed to handle a wide range of listening levels, but every speaker has limits. It is important to use common sense and listen for signs of possible distress from the speakers. Underpowered amplifiers are most often the cause of speaker damage. For example, a 60-watt amplifier runs out of power when called upon to produce more than 60 watts, and the resulting distortion can damage the speaker. If you tend to listen at high voumes, more powerful amplifiers are preferable because they are less likely to run out of power.

Noticeable distortion or harsh breakup is an indication that either your amplifier or your speakers are running beyond their capacity, and the volume should be decreased. If you can feel any heat emanating from the woofer or tweeter, reduce the level immediately. Speaker damage most often occurs from sustained high volume levels, not from transient sounds or brief musical peaks. Excessive boosting of bass, treble or equalizer controls can worsen the problem, and is not recommended.

■ Maintenance

Your speakers require minimal maintenance under normal use. The cabinet may be cleaned using a damp cloth or a mild, non-abrasive glass cleaner. To clean the grille, first remove it from the speaker, then brush lightly with a soft brush or use a vacuum on its lowest setting. Do not expose the speaker to direct sunlight, high temperatures, or moisture. Do not attempt to clean the actual drivers.

Limited Warranty Valid Only in the U.S.A.

Warranty Period

For the period of 5 years for parts and 5 years for labor from date of original purchase (the warranty period) from an authorized NHT dealer, Now Hear This (NHT) warrants that if our product fails to function properly under normal use due to a manufacturing defect when installed and operated according to the owner's manual instructions enclosed with the unit, it will be repaired or replaced with a unit of comparable value at the option of NHT without charge to you for parts or actual repair work. Parts supplied under this warranty may be new or rebuilt at the option of NHT

What's Not Covered

This warranty does not cover any product which is used in any trade or business, or in an industrial or commercial application.

This warranty does not cover the cabinet or any appearance item, or any damage caused to the product resulting from: alterations, modifications not authorized in writing by NHT, accident, misuse or abuse, damage due to lightning or power surges, or being subjected to power in excess of the speaker's published power rating.

This warranty does not cover the cost of parts which would otherwise be provided without charge under this warranty, obtained from any source other than an authorized NHT service location. This warranty does not cover defects or damage caused by the use of unauthorized parts or labor or from improper maintenance.

Altered, defaced or removed serial numbers void this warranty.

Your Rights

The liability of NHT will be limited to the purchase price of the product, and NHT will not be liable for incidental or consequential damages. NHT limits its obligations under any implied warranties under state laws to a period not exceed the warranty period. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages. The above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

To Obtain Service

NHT has appointed a number of authorized service companies throughout the USA should your product ever require service. To receive warranty service, you will need to present your sales receipt showing place and date of original owner's transaction.

To find the name and address of the nearest authorized NHT service location, call or write:

Customer Service Department, Now Hear This, 535 Getty Court, Benicia, CA 94510.

1-800-NHT-9993.

Please do not return product to this address. It's not a service location.

Keep this warranty with your sales receipt.

Record date and place of purchase for future reference.



HDP-1

Hybrid Dipole Surround Loudspeaker

Owner's Manual

Now Hear This 6400 Goodyear Road Benicia, CA 94510 800-NHT-9993